

WHAT IS CLAIMED IS:

1. A compliant laminar eddy current sensitivity standard comprising:

a sheet of nonconductive, nonmagnetic material;

at least one strand of highly conductive material embedded in said sheet; and

an adhesive layer affixed to a surface of said nonconductive, nonmagnetic material.

2. A compliant laminar eddy current sensitivity standard according to claim 1, wherein said nonconductive, nonmagnetic material comprises a polymer material.

3. A compliant laminar eddy current sensitivity standard according to claim 2, wherein said polymer material is selected from the group consisting of a polyethylene terephthalate material, a polytetrafluoroethylene material, a polyamide material, and mixtures thereof.

4. A compliant laminar eddy current sensitivity standard according to claim 1, wherein said nonconductive, nonmagnetic material has a thickness less than about 0.0060 inches.

5. A compliant laminar eddy current sensitivity standard according to claim 1, wherein said nonconductive, nonmagnetic material has a thickness less than about 0.0050 inches.

6. A compliant laminar eddy current sensitivity standard according to claim 1, wherein said highly conductive material is

selected from the group consisting of copper, copper alloys, aluminum, aluminum alloys, silver, silver alloys, gold, gold alloys, and mixtures thereof.

7. A compliant laminar eddy current sensitivity standard according to claim 6, wherein each said strand is formed from aluminum foil and has a width in the range of from about 0.050 inches to about 0.110 inches and a thickness in the range of from about 0.002 inches to about 0.004 inches.

8. A compliant laminar eddy current sensitivity standard according to claim 6, wherein each said strand is formed from a copper wire having a diameter of about 0.0035 inches.

9. A compliant laminar eddy current sensitivity standard according to claim 6, wherein each said strand is formed from a copper foil having a width in the range of about 0.010 inches to about 0.040 inches and a thickness in the range of from about 0.0007 inches to about 0.0014 inches.

10. A compliant laminar eddy current sensitivity standard according to claim 1, wherein said nonconductive, nonmagnetic material and each said highly conductive strand have the same length.

11. A compliant laminar eddy current sensitivity standard according to claim 1, wherein said adhesive layer is formed from a pressure sensitive adhesive.

12. A compliant laminar eddy current sensitivity standard according to claim 11, wherein said adhesive layer has a thickness as great as 0.0015 inches.

13. A compliant laminar eddy current sensitivity standard according to claim 11, wherein said adhesive layer has a thickness less than or equal to about 0.0010 inches.

14. A compliant laminar eddy current sensitivity standard according to claim 1, further comprising a removable backing material affixed to a surface of said adhesive layer.

15. A compliant laminar eddy current sensitivity standard according to claim 1, wherein said sheet has a size and shape which corresponds to the size and shape of a part to be inspected.

16. A method of using a compliant laminar eddy current sensitivity standard comprising the steps of:

providing a sheet of nonconductive, nonmagnetic material having at least one strand of highly conductive material embedded in the sheet and an adhesive layer affixed to a surface of the nonconductive, nonmagnetic material;

adhering said individual sensitivity standard to a surface of said part to be inspected; and

passing an eddy current probe over a surface of said individual sensitivity standard.